

REMARKS

The above amendments and the following remarks are fully and completely responsive to the Office Action dated October 4, 2004. Claims 11 and 12 are pending in this application with claims 1-10 and 13 cancelled. Claims 11 and 12 have been amended. Applicant notes that claims 1-10 and 13 were cancelled using Applicant's Continuing Application Transmittal filed January 23, 2004. In the outstanding Office Action, claims 1-10 were rejected under 35 U.S.C. § 101; claim 13 was rejected under 35 U.S.C. § 112, second paragraph; and claims 11-13 were rejected under 35 U.S.C. § 103(a). No new matter has been added. Claims 11 and 12 are presented for reconsideration.

35 U.S.C. § 101

Claims 1-10 were rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1-10 of prior U.S. Patent No. 6,701,396. The cancellation of claims 1-10 renders this rejection moot.

35 U.S.C. § 112, Second Paragraph

Claim 13 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The cancellation of claim 13 renders this rejection moot.

35 U.S.C. § 103(a)

Claims 11-13 were rejected under 35 U.S.C. § 103(a) as being obvious over Abughazaleh et al. (U.S. Patent No. 6,184,813, "Abughazaleh") in view of Aoyagi et al. (U.S. Patent No. 6,335,696, "Aoyagi"). In making this rejection, the Office Action asserts that the combination of these two references teaches and/or suggests the claimed invention. The Office Action also asserts that it would be obvious to one of ordinary skill in the art to combine these two references.

Each of claims 11 and 12 recites, in part:

...a control circuit which outputs a first control signal to said self-oscillation circuit, outputs a second control signal to said frequency divider, and controls the operation of said self-oscillation circuit and said frequency divider based on a starting signal and a timing signal output from said frequency divider using the first and second output signals, wherein said control circuit provides a control to stop the self-oscillation of said self-oscillation circuit when said frequency divider outputs the stop signal; and

Abughazaleh teaches using a strobe shift register 250 to synchronize signals. The strobe shift register includes a clock generator 310 that provides two timing signals PH1 and PH2 to a ripple shift register 312. The ripple shift register 312 includes a feedback line 340. The clock generator 310 receives a signal from the feedback line 340 and uses this signal as a stop signal.

The clock generator 310 is formed from a trigger circuit that receives the start and stop signals. The start signal is provided from SYNCH signal 51. The stop signal is provided from feedback line 340. The trigger circuit provides an output to ring oscillator 420.

The ring oscillator 420 receives the output from the trigger circuit 410 and also receives the signbit input. The ring oscillator outputs a signal to the frequency divider 430. The frequency divider 430 provides an output signal to phase generator 440 which outputs the timing signals PH1 and PH2.

The trigger circuit 410 only outputs a control signal to the ring oscillator. Trigger circuit 410, however, does not provide a control signal to the frequency divider 430. Consequently, Abughazaleh fails to teach and/or suggest “a control circuit which outputs a first control signal to said self-oscillation circuit, outputs a second control signal to said frequency divider, and controls the operation of the self-oscillation circuit and said frequency divider based on a starting signal and a timing signal output from said frequency divider using the first and second output signals”.

The frequency divider 430 only outputs a signal to the phase generator 440. Frequency divider 430, however, does not output a stop signal. Consequently, Abughazaleh fails to teach and/or suggest that the “control circuit provides a control to stop the self oscillation of said self-oscillation circuit when said frequency divider outputs the stop signal”. Abighazaleh also fails to teach and/or suggest “a frequency divider ... wherein said frequency divider ... outputs a stop signal when the count reaches the number n”.

Aoyagi is neither cited for, nor teaches, the recited control circuit. Accordingly, the combination of Abughazaleh and Aoyagi fails to teach and/or suggest the claimed invention. Specifically, the combination of these two references fails to teach and/or suggest “a control circuit which outputs a first control signal to said self-oscillation circuit, outputs a second control signal to said frequency divider, and controls the

operation of said self-oscillation circuit and said frequency divider based on a starting signal and a timing signal output from said frequency divider using the first and second output signals". The combination of these two references fails to teach and/or suggest that the "control circuit provides a control to stop the self-oscillation of said self-oscillation circuit when said frequency divider outputs the stop signal". The combination of these two references also fails to teach and/or suggest "a frequency divider ... wherein said frequency divider ... outputs a stop signal when the count reaches the number n". Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 11 and 12 under 35 U.S.C. § 103(a).

Conclusion

Applicant's amendments and remarks have overcome the rejections set forth in the Office Action dated October 4, 2004. Specifically, the cancellation of claims 1-10 renders moot the rejection of these claims under 35 U.S.C. § 101. Applicant's cancellation of claim 13 renders moot the rejection of this claim under 35 U.S.C. § 112, second paragraph, and 35 U.S.C. § 103(a). Applicant's remarks have distinguished claims 11 and 12 from the combination of Abughazaleh and Aoyagi and thus overcome the rejection of these claims under 35 U.S.C. § 103(a). Accordingly, claims 11 and 12 are in condition for allowance. Therefore, Applicant respectfully requests consideration and allowance of claims 11 and 12.

Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully

requests that the Examiner contact the undersigned attorney by telephone if it is believed that such contact will expedite the prosecution of the application.

In the event that this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time.

The Commissioner is authorized to charge payment for any additional fees which may be required with respect to this paper to our Deposit Account No. 01-2300, making reference to attorney docket number 108391-00037.

Respectfully submitted,
ARENT FOX PLLC



Rustan J. Hill
Attorney for Applicant
Registration No. 37,351

Customer No. 004372
ARENT FOX PLLC
1050 Connecticut Avenue, N.W.,
Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810

RJH/elz

Enclosure: Petition for Extension of Time

TECH/283692.1